

first, in this turkey, for several days disordered and irregular movements were present, but these gradually gave place to paralysis. Patients complain of being unable to feel the ground below their feet, but their movements are not really paralyzed. Lusanna believes that the cause of these symptoms is *the loss of the muscular sense*, which co-ordinates voluntary movements. This sense differs from cutaneous sensibility in its anatomy, by its central organs, by its peripheral apparatus, and by its nerves. In its absence, an animal no longer feels the solidity of the earth on which it stands; it does not feel the resistance of the medium in which it flies or swims; it no longer feels the impenetrability of objects which oppose its progress, nor the weight of any body it attempts to seize or carry.

In man, diseases of the cerebellum usually give rise to hemiplegia of the opposite side of the body, most marked in the inferior extremity. In animals, the peculiar rotatory movements are disordered efforts at movement, but are nevertheless always voluntarily executed.(!) In birds, the disordered movements are bilateral or general; in mammals, they are unilateral. In the former, the cerebellum is one single mass superimposed on the medulla oblongata, and there is in it no decussation of its crura; in the latter, there are two lateral and a central lobe, and the posterior crura decussate. There is a correspondence in all classes of animals between the perfection of muscular sense and the development of the cerebellum. Lusanna is further of opinion that the cerebellum is the organ of the erotic sense, and that the middle lobe is the special seat of this function.

In reply to some critical remarks of Dr. Brown-Séquard on the above paper, Dr. Lusanna, in a subsequent article, adduces further proof of the correctness of his theory that the cerebellum is the organ of the muscular sense. He affirms that in 128 recorded cases of affection of the cerebellum, there is not one in which the symptoms were not those which characterize a lesion of the muscular sense, expressed, not by a state of irritation, but by want of action. If one such case, well observed, in which a *considerable* lesion of the cerebellum is not accompanied by lesion of the voluntary movements in some part of the body, can be adduced, Lusanna is willing to give up his theory. In the case of Schroeder van der Kolk, cited by Brown-Séquard, in which, after a wound of the cerebellum, the patient could walk or mount a ladder, there is no proof of any considerable destruction of the organ, and the symptoms would rather be those of irritation than of absence. A wound of the brain does not annihilate intelligence, yet no one asserts that the brain is not the organ of the intellect. If an animal, which has survived the removal of the cerebellum, does not exhibit signs of the loss of the muscular sense, the author is willing to abandon his theory. Experiments on fishes confirm what the author has observed in warm-blooded vertebrata. When vomiting, irregularity of the circulation, syncope, and convulsions occur, they indicate injury of the medulla oblongata, and are usually of fatal import. On the other hand, lesions of motility are by all experimenters regarded as characteristic of injury of the cerebellum.—*Ed. Med. Journ.*, May, 1864, from *Journ. Physiol.*, 1862, and April, 1863.

MATERIA MEDICA AND PHARMACY.

5. *Action of Bromide of Potassium in inducing Sleep.*—Mr. H. BEHREND extols (*Lancet*, May 28, 1864) this remedy in the treatment of insomnia and restlessness, accompanied by and dependent upon nervous excitement and irritability. Dr. Brown-Séquard first drew Mr. B.'s attention to this action of the article in question. Dr. Garrod also in his recent lectures on the British Pharmacopœia states that the bromide of potassium in large doses produces drowsiness.

The cases in which this remedy appears likely to be most useful, Dr. B. says, are those in which the nervous element preponderates, and it is in these that, for the most part, opium and its preparations fail to produce any good result, and are not well borne by the system, frequently even adding to the excitement

and irritability under which the patient labours. There can be no doubt, moreover, that cases of this type are unfortunately on the increase, since the highly artificial mode of life of the present day, especially in large cities, perpetually stimulates the nervous energy to the highest possible degree; so that even in the strongest constitutions the mental equilibrium is but too often shaken, and the weaker ones yield speedily to the excessive demands made upon them. The dose of the bromide recommended [25 grains three times a day] may appear large, but it is in all cases easily tolerated, and produces neither disagreeable nor toxic effects; the appetite is not interfered with, the alvine evacuations are regular and copious, and irritability of the bladder—a frequent accompaniment of restless nights—is greatly relieved. The only unpleasant result Mr. B. has witnessed has been slight and temporary headache; and Dr. Brown-Séquard, Mr. B. states, has given it with perfect safety for several successive weeks in drachm doses. Of the temporary paralysis, and weakening of sexual desire and power, which are said to follow upon the administration of large doses of the bromide of potassium, Mr. B. has seen nothing. Mr. B. wishes to try this remedy in the treatment of the restlessness of delirium tremens, but has not had the opportunity since he has become acquainted with its action upon the nervous system.

6. *Action of Digitaline on the Urine.*—According to Dr. B. H. STADION, of Kiew, the following are the results derived from a series of experiments. 1. Digitaline produces in health a diminution in the quantity of liquid secreted by the kidneys. 2. It diminishes the amount of the principal constituents of the urine, such as urea, chloride of sodium, the phosphates and sulphates. 3. The uric acid alone is increased; but the degree of acidity of the urine remains the same. 4. The specific gravity of the urine is diminished. 5. Digitaline at first increases the frequency of the pulse; it then produces a diminution in the number of contractions of the heart. 6. The rapid emaciation and the retardation of nutrition which follow the employment of digitaline are two important facts which aid us in understanding its action and proper mode of administration. 7. Digitaline acts like digitalis on the circulatory, nervous, muscular, and generative systems. 8. It is an energetic depressant of the generative system, and may for the time abolish all sexual desire. 9. Its action on the intestinal canal and digestive organs is less than that of digitalis. 10. A peculiar affection of the nasal mucous membrane, under the form of coryza, appears to constitute a characteristic symptom during the use of digitaline. 11. The power of digitaline appears to be thirty times as great as that of digitalis. 12. The ordinary dose of digitaline should not exceed one-fifth of a grain daily; in most cases, from one-twentieth to one-sixth of a grain is sufficient.—*Gaz. Méd. de Paris*, 28 Nov., 1863, from *Vierteljahrschr. für die prakt. Heilk.*

7. *An Ounce of Quinine Administered by Mistake.*—Dr. TAUSSIG, of Rome, relates (*Med. Times and Gaz.*, April 23, 1864) the following case of this:—

“Dr. Hayler, a military surgeon, visited in barracks a soldier, suffering from a relapse of ague, and administered to him a small dose of sulphate of quinine. At the same time, he directed a man to fetch one ounce of the same remedy from the hospital, in order that he might have it in readiness for any emergency. The man received the bottle; but, supposing that it was ordered for the patient just mentioned, he took it to him. In the presence of their comrades, they put the whole into a cup, adding sufficient water to make a paste of it; and the patient, although he found the medicine uncommonly bitter, did not leave off until he had taken it all.

“Dr. Hayler, on learning that this enormous dose had been taken, at once visited the patient. The most careful investigation left no doubt of the fact; but, with all that, *incredibile dictu*, except a complete deafness and a kind of stupor, no other bad effect ensued, and no antidote was administered. He was directed to the hospital, where he remained a week under observation, and left the establishment in the best state of health. The ague disappeared, probably never to return. I saw the man myself; he is a Swiss, named Albitz, aged 30, of small stature, and of a strong constitution.”